WHAT IS CLAIMED IS:

1. A method of reducing phosphate ore losses in a desliming process comprising:

directing a phosphate ore feed preparation slurry to a desliming unit;

adding a sufficient amount of one, of one or more surfactants, of one or more organic polymers and of a combination of said surfactants and organic polymers, to the phosphate ore feed preparation slurry;

mixing said sufficient amount of one, of one or more surfactants, of one or more organic polymers and of the combination of said one or more surfactants and one or more organic polymers, so as to reduce a viscosity of the phosphate ore feed preparation slurry and wherein fine phosphate ore particles are made to settle for recovery;

collecting said fine phosphate ore particles which have settled out from the phosphate ore feed preparation slurry; and

directing said collected fine phosphate ore particles along with coarser fractions to a beneficiation process for recovering a phosphate ore product.

2. The method according to Claim 1, wherein when the combination of the one or more surfactants and one or more organic polymers is added to the phosphate ore feed preparation slurry, the one or more surfactants are added prior to the addition of the one or more organic polymers.

3. The method according to Claim 1, wherein when the combination of the one or more surfactants and one or more organic polymers is added to the phosphate ore feed preparation slurry, the one or more organic polymers are added prior to the addition of the one or more surfactant.

4. The method according to Claim 1, wherein when the combination of the one or more surfactants and one or more organic polymers is added to the phosphate ore preparation slurry, the one or more surfactants and the one or more organic polymers are added to the phosphate ore preparation slurry simultaneously.

5. The method according to Claim 1,

wherein the one or more surfactants are anionics selected from the group consisting of ammonium salts, lithium salts, sodium salts, and potassium salts of C_6-C_{16} alkyl-X, alkylene-X, aryl-X, alkyl aryl-X, naphthalene-X, and combinations thereof,

wherein X is one of mono-sulfonic acids, poly-sulfonic acids, mono-sulfuric acids, poly-sulfuric acids, mono-phosphoric acids, poly-phosphoric acids, mono-phosphonic acids, poly-phosphonic acids, mono-carboxylic acids, poly-carboxylic acids, and combinations thereof, and

wherein the one or more organic polymers are selected from the group consisting of synthetic polymers, semisynthetic polymers, natural polymers and combinations thereof.

6. The method according to Claim 5, wherein the polymers are selected from the group consisting of formaldehyde products, cellulose products, gelatin products, starch products, acrylamides, acrylates, and their related products.

7. The method according to Claim 1, wherein the desliming unit comprises one of large tanks, settling tanks, sand traps, a hydrocyclones, classifiers, thickeners, and ground containment areas.

8. A method of reducing phosphate ore losses in a desliming process comprising:

adding one of a sufficient amount of one or more surfactants, a sufficient amount of one or more organic polymers and a sufficient amount of a combination of said surfactants and organic polymers to a phosphate ore feed preparation slurry in a desliming unit;

mixing said one of the sufficient amount of the one or more surfactants, the sufficient amount of the one or more organic polymers and the sufficient amount of the combination of said one or more surfactants and one or more organic polymers, so as to reduce the viscosity of the phosphate ore preparation

slurry and wherein fine phosphate ore particles are made to settle and are collected for recovery.

9. The method according to Claim 8, wherein when the combination of the one or more surfactants and one or more organic polymers is added to the phosphate ore preparation slurry, the surfactant is added prior to the addition of the one or more organic polymers.

10. The method according to Claim 8, wherein when the combination of the one or more surfactants and one or more organic polymers is added to the phosphate ore feed preparation slurry, the one or more organic polymers are added prior to the addition of the one or more surfactants.

11. The method according to Claim 8, wherein when the combination of the one or more surfactants and the one or more organic polymers is added to the phosphate ore feed preparation slurry, the one or more surfactants and the one or more organic polymers are added to the phosphate ore feed preparation slurry simultaneously.

12. The method according to Claim 8,

wherein the one or more surfactants are anionics surfactant selected from the group consisting of ammonium salts, lithium salts, sodium salts, and potassium salts of C_6-C_{16} alkyl-

R, alkylene-R, aryl-R, alkyl aryl-R, naphthalene-R, and combinations thereof,

wherein R is one of mono-sulfonic acids, poly-sulfonic acids, mono-sulfuric acids, poly-sulfuric acids, mono-phosphoric acids, poly-phosphoric acids, mono-phosphonic acids, poly-phosphonic acids, mono-carboxylic acids, poly-carboxylic acids, and combinations thereof, and

wherein the organic polymer is selected from the group consisting of synthetic polymers, semisynthetic polymers, natural polymers and combinations thereof.

13. The method according to Claim 12, wherein the polymers are selected from the group consisting of formaldehyde products, cellulose products, gelatin products, starch products, acrylamides, acrylates, and their related products.

14. The method according to Claim 8, wherein the desliming unit comprises one of large tanks, settling tanks, sand traps, hydrocyclones, classifiers, thickeners, and ground containment areas.